CLAIMS

1. Oxide cathode (2) comprising a support (1) and an oxide layer (3) on the support, characterized in that it furthermore includes particles (8) of a conducting material having a first end (8a) incorporated in the support (1) and a second end (8b) lodged in the oxide layer (3), so as to constitute conducting bridges passing through an interface layer (6) forming between the support (1) and the oxide layer (3).

2. Oxide cathode (2) according to Claim 1, characterized in that the conducting material of the particles (8) is a carbide of one or more metals.

3. Oxide cathode (2) according to Claim 2, characterized in that the conducting material of the particles (8) is a carbide of one or more metals of Group IVB, and preferably at least one metal from: titanium (Ti), zirconium (Zr) and hafnium (Hf).

4. Oxide cathode (2) according to Claim 2 or 3, characterized in that the conducting material of the particles (8) is a carbide of one or more metals of Group VB, and preferably at least one metal from: vanadium (V), niobium (Nb) and tantalum (Ta).

5. Oxide cathode (2) according to any one of Claims 2 to 4, characterized in that the conducting material of the particles (8) is a carbide of one or more metals of Group VIB, and preferably at least one metal from: chromium (Cr), molybdenum (Mo) and tungsten (W).

6. Oxide cathode (2) according to any one of Claims 1 to 5, characterized in that the support (1) is made of metal, preferably a nickel-based metal.

7. Electron tube, characterized in that it comprises an oxide cathode (2) according to any one of Claims 1 to 6.

8. Cathode-ray tube, characterized in that it comprises an oxide cathode (2) according to any one of Claims 1 to 6.

9. Process for manufacturing an oxide cathode (2), in which an oxide layer (3) is deposited on a support (1), characterized in that it comprises the steps consisting in:

- furnishing that surface (1a) of the support (1) which is intended to receive the oxide layer (3) with particles (8) of conducting material so that the particles have a first end (8a) incorporated in the support (1) and a second end (8b) which is exposed; and
- covering said surface (1a) with an oxide layer (3).

10. Process according to Claim 9, characterized in that the step of furnishing the particles (8) of conducting material consists in spreading out the particles over said surface (1a) and in applying a force to the particles in order to encrust said first end (8a) of the latter in the support (1).

11. Process according to Claim 9, characterized in that the step of furnishing the particles (8) of conducting material consists in incorporating the particles in the support (1) and in making said second end (8b) stand out from the support by a surface treatment, for example by means of a selective chemical etching treatment.

12. Process according to Claim 11, characterized in that the particles (8) are incorporated in the support (1) during the metallurgical production of the latter.

13. Process according to Claim 11 or 12, in which the support (1) is formed by drawing, characterized in that said second end (8b) of the particles (8) is made to stand out before the drawing.

14. Process according to Claim 11 or 12, in which the support (1) is formed by drawing, characterized in that said second end (8b) of the particles (8) is made to stand out after the drawing.

15. Process according to any one of Claims 9 to 14, characterized in that the conducting material of the particles (8) is a carbide of one or more metals.

16. Process according to Claim 15, characterized in that the conducting material of the particles (8) is a carbide of one or more metals of Group IVB, and preferably at least one metal from: titanium (Ti), zirconium (Zr) and hafnium (Hf).

17. Process according to Claim 15 or 16, characterized in that the conducting material of the particles (8) is a carbide of one or more metals of Group VB, and preferably at least one metal from: vanadium (V), niobium (Nb) and tantalum (Ta).

18. Process according to any one of Claims 15 to 17, characterized in that the conducting material of the particles (8) is a carbide of one or more metals of Group VIB, and preferably at least one metal from: chromium (Cr), molybdenum (Mo) and tungsten (W).

19. Process according to any one of Claims 9 to 18, characterized in that the support (1) is made of metal, preferably a nickel-based metal.